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WHAT IS CLAIMED IS:

1. A cell comprising an anode casing having an open end and a closed end and a cathode casing, wherein the anode casing has an edge surface at the open end thereof, the improvement comprising said edge surface plated with a layer of protective material so that said edge surface is covered with said protective material.

2. The cell of claim 1 wherein said cell is a zinc/air depolarized cell.

3. The cell of claim 2 wherein said cell comprises an anode material comprising zinc and alkaline electrolyte within said anode casing, and a catalytic cathode within said cathode casing, wherein the cathode casing is in the form of a can having an open end and a closed end, and wherein said anode casing is in the form of a can comprising a body having an open end and a closed end and an inside surface and an outside surface.

4. The cell of claim 3 wherein the open end of the anode casing resides within the open end of the cathode casing with electrically insulating material between said anode and cathode casing and abutting at least a portion of said anode casing outside surface.

5. The cell of claim 4 wherein said anode casing has a circumventing peripheral edge surface at the open end thereof and said peripheral edge is plated with said layer of protective material.

6. The cell of claim 4 wherein the inside surface of the anode casing is also plated with said same protective material.

7. The cell of claim 6 wherein said protective material consists essentially of an elemental metal.

8. A zinc/air depolarized cell comprising an anode casing and a cathode casing, an anode material comprising zinc and alkaline electrolyte within said anode casing, and a catalytic cathode within said cathode casing, wherein the cathode casing is in the form of a can having an open end and a closed end, and wherein said anode casing is in the form of a can comprising a body having an open end and a closed end and an inside surface and an outside surface, wherein the open end of the anode casing resides within the open end of the cathode casing with electrically insulating material between said anode and cathode casings and abutting at least a portion of said anode casing outside surface, wherein the anode casing has a circumventing peripheral edge surface at the open end thereof, the improvement comprising said circumventing peripheral edge surface plated with a homogeneous layer of protective metal so that said peripheral edge surface is covered with said protective metal layer.

9. The zinc/air cell of claim 8 wherein said anode casing body is formed of at least two different metals one plated or clad onto the other so that at least a portion of said different metals are exposed along said peripheral edge surface and said layer of protective metal plated on said peripheral edge surface covers said different metals.

10. The zinc/air cell of claim 8 wherein said layer of protective metal is selected from the group consisting of tin, indium, silver, copper, gold, brass, bronze and alloy of the combination tin and lead.

11. The zinc/air cell of claim 8 wherein at least a portion of the outside surface of said anode casing abutting said insulating material is plated with at least one layer of said protective metal.

12. The zinc/air cell of claim 8 wherein said protective metal plated onto said anode casing peripheral edge has a thickness of between about 0.0001 and 0.015 mm.

13. A zinc/air depolarized cell comprising an anode casing and a cathode casing, an anode material comprising zinc and alkaline electrolyte within said anode casing, and a catalytic cathode within said cathode casing, wherein the cathode casing is in the form of a can having an open end and a closed end, and wherein said anode casing is in the form of a can comprising a body having an open end and a closed end and an inside surface and an outside surface, wherein the open end of the anode casing resides within the open end of the cathode casing with electrically insulating material between said anode and cathode casings and abutting at least a portion of said anode casing outside surface, wherein the anode casing has a circumventing peripheral edge surface at the open end thereof, wherein said anode casing body is formed of at least two different metals one plated or clad onto the other so that at least a portion of said different metals are exposed along said peripheral edge surface, wherein said anode casing peripheral edge surface is plated with at least one layer of protective metal thereby covering and preventing exposure of said different metals at said peripheral edge surface.

14. The zinc/air cell of claim 13 wherein said layer of protective metal consists essentially of an elemental metal.

15. The zinc/air cell of claim 13 wherein said cell has a disk-like cylindrical shape of diameter between about 4 and 20 mm and a height between about 2 and 10 mm.

16. The zinc/air cell of claim 13 wherein said cell has a disk-like cylindrical shape of diameter between about 4 and 12 mm and a height between about 2 and 6 mm.

17. The zinc/air cell of claim 13 wherein said protective metal is applied to cover said anode casing peripheral edge after said anode casing has been formed into said can shape.

18. The zinc air cell of claim 13 wherein at least a portion of the outside surface of said anode casing is also plated with said protective metal.

19. The zinc/air cell of claim 13 wherein at least a portion of the outside surface of said anode casing abutting said insulating material is plated with said protective metal and said insulating material is in contact with said protective metal providing a seal therebetween.

20. The zinc/air cell of claim 13 wherein said protective metal plated on said anode casing peripheral edge surface eliminates the electrochemical potential gradient at the surface of said peripheral edge thereby reducing the chance of electrolyte seepage from the cell.

21. The zinc/air cell of claim 13 wherein said protective metal is selected from the group consisting of tin, indium, silver, copper, zinc, gold, brass, bronze and alloy of the combination tin and lead.

22. The zinc/air cell of claim 14 wherein said protective metal is selected from the group consisting of tin, indium, silver, copper, zinc, and gold.

23. The zinc/air cell of claim 13 wherein said protective metal plated over said anode casing peripheral edge has a thickness of between about 0.0001 and 0.015 mm.

24. The zinc/air cell of claim 13 wherein said protective metal over said anode casing peripheral edge is selected from the group consisting of tin and copper.

25. The zinc/air cell of claim 13 wherein said protective metal plated onto said anode casing peripheral edge is of homogeneous composition.

26. The zinc/air cell of claim 25 wherein said protective metal plated onto said anode casing peripheral edge has a uniform thickness.

27. The zinc/air cell of claim 13 wherein said protective metal is plated in a plurality of layers over said anode casing peripheral edge wherein each layer is composed individually of a homogeneous metal selected from the group consisting of tin, zinc, indium, silver, copper, gold, brass, bronze, and alloy of the combination tin and lead.

28. The zinc/air cell of claim 19 wherein the protective metal plated on said portion of the outside surface of said anode casing abutting said insulating material has the same composition as the protective metal plated on the anode casing peripheral edge.

29. The zinc/air cell of claim 13 wherein said cathode casing has at least one hole in its surface to allow air to penetrate into the cell when the cell is in use.

30. The cell of claim 13 wherein the anode casing has a wall thickness between about 0.001 inches (0.0254 mm) and 0.015 inches (0.38 mm).

31. The cell of claim 13 wherein the anode casing is of triclad material comprising stainless steel having a layer of nickel on its outside surface and a layer of copper on its inside surface, said copper layer in contact with said zinc.

32. The cell of claim 31 wherein the nickel layer has a thickness of between about 0.0001 inches (0.00254 mm) and 0.001 inches (0.0254 mm).

33. The cell of claim 13 wherein said zinc particles comprises zinc alloyed with and alloy material comprising indium.

34. The cell of claim 33 wherein said alloy material comprises between about 100 and 1000 parts per million parts by weight based on pure zinc.

35. The cell of claim 13 wherein said zinc particles comprises zinc alloyed with and alloy material comprising indium and bismuth.

36. The cell of claim 35 wherein said alloy material comprises between about 100 and 2000 parts per million parts by weight based on pure zinc.

37. The cell of claim 13 wherein said cathode is a catalytic cathode comprising carbon and MnO_2.

38. The cell of claim 13 wherein the anode material comprises less than about 100 parts mercury per million parts of zinc by weight.

39. The cell of claim 13 wherein the inside surface of the anode casing is also plated with said same protective material.

40. The cell of claim 19 wherein at least a portion of said closed end of the anode casing is exposed to the external environment and said exposed portion is also plated with said protective material.

41. The cell of claim 40 wherein said exposed portion of the anode casing at the closed end thereof is plated with a layer of anticorrosive metal over said protective material.

42. The cell of claim 41 wherein said anticorrosive metal is selected from the group consisting of gold, tin, brass, bronze, nickel and chromium.

43. The cell of claim 41 wherein said anticorrosive metal is tin.

44. A process for selectively plating metal onto an exposed surface of a zinc/air cell, wherein said cell comprises an anode casing inserted into a cathode casing whereby at least a portion of the anode and cathode casing is exposed to the environment, said process comprising the steps of:

(a) allowing sufficient air to enter the cell to activate the cell,

(b) immersing the cell into a plating bath comprising metal ions so that at least a portion of the anode casing and at least a portion of the cathode casing is immersed in the bath;

(c) allowing electroplating to occur in said bath, with said cell being a driving power source thereof, whereupon elemental metal is plated onto said exposed surface of the anode casing *but not on the cathode casing*.

45. The process of claim 44 wherein said zinc/air cell is a button cell having a diameter between about 4 and 20 mm and a height between about 2 and 10 mm.

46. The process of claim 44 wherein the cell is immersed into said plating bath by suspending it from an adhesive tape.

47. The process of claim 44 wherein the plating bath comprises a solution of stannous sulfate and elemental tin is plated onto the exposed surface of said anode casing.